IN THE CLAIMS

1. (Currently Amended) A water soluble thermosetting polyester resin composition for undercoating a pre-coated metal steel sheet, prepared ~~from~~by:

reacting terephthalic acid with ethylene glycol in a molar ratio of terephthalic acid to ethylene glycol of about 1:1 to about 1:1.4 to produce polyethylene terephthalate;

condensing the polyethylene terephthalate with a glycol and a polybasic acid to produce a thermosetting polyester resin;

reacting about 100 parts by weight of the thermosetting polyester resin ~~obtained by condensing polyethylene terephthalate using glycol and polybasic acid,~~ with about 5 ~~-~~to about 20 parts by weight of an anhydrous polybasic acid to produce a product; and

adding an amine~~,~~ into the product until the pH of the product is about 7 to about 9.~~wherein polyethylene terephthalate is synthesized by using terephthalic acid and ethylene glycol, a mixing ratio of terephthalic acid and ethylene glycol being about 1.0 : 1.0-1.4 by equivalent.~~

2. (Canceled)

3. (Currently Amended) The water soluble thermosetting polyester resin composition of claim 1, wherein the thermosetting polyester resin has an acid value of about 20- to about 30, a hydroxyl value of about 50- to about 120, and a molecular weight of about 8,000- to about 20,000.

4. (Currently Amended) The water soluble thermosetting polyester resin composition of claim 1, wherein the thermosetting polyester resin composition has an acid value of about 60- to about 80, a hydroxyl value of about 50- to about 120, ~~pH of about 7-9~~ and a water diluting property of about at least 300%.

5. (Currently Amended) A method of preparing a water soluble thermosetting

polyester resin composition for undercoating a pre-coated metal steel sheet, comprising:

reacting terephthalic acid with ethylene glycol in a molar ratio of terephthalic acid to ethylene glycol of about 1:1 to about 1:1.4 to produce polyethylene terephthalate;

condensing the polyethylene terephthalate with a glycol and a polybasic acid to produce a thermosetting polyester resin;

~~preparing a polyester resin by adding glycol and polybasic acid into polyethylene terephthalate and condensing a resultant mixture, wherein polyethylene terephthalate is synthesized by using terephthalic acid and ethylene glycol, a mixing ratio of terephthalic acid and ethylene glycol being about 1.0 : 1.0-1.4 by equivalent;~~

reacting about 100 parts by weight of the thermosetting polyester resin with about 5 to about 20~~adding 5-20~~ parts by weight of an anhydrous polybasic acid ~~into 100 parts by weight of thus prepared polyester resin to carry out~~through a ring opening addition or condensation polymerization reaction to produce a product; and

adding an amine into the product for neutralization until the pH of the~~us prepared~~ product ~~through the ring opening addition or condensation polymerization reaction becomes~~is about 7 to about~~-~~ 9.

6. (Currently Amended) The method of preparing a water soluble thermosetting polyester resin composition of claim 5, wherein the thermosetting polyester resin is prepared by using a glycol and a polybasic acid with a molar ratio of the glycol to the polybasic acid ~~mixing ratio~~ of about ~~1.0 : 1.0-1.1~~1:1 to about 1:1.1, and further wherein the thermosetting polyester resin ~~by equivalent and~~ has an acid value of about 20~~-~~ to about 30, a hydroxyl value of about 50~~-~~ to about 120, and a molecular weight of about 8,000~~-~~ to about 20,000.

7. (Currently Amended) The method of preparing a water soluble thermosetting polyester resin composition of claim 5, wherein the glycol is at least one selected from the group consisting of ethylene glycol, propylene glycol, 1,4-butylene glycol, 1,6-hexanediol, neopentyl glycol, methylpropanediol, cyclohexane dimethanol, hydrogenated bisphenol A,

ethylene oxide added bisphenol A, propylene oxide added bisphenol A, ethylene oxide added bisphenol F, propylene oxide added bisphenol F, ethylene oxide added bisphenol S, and propylene oxide added bisphenol S.

8. (Currently Amended) The method of preparing a water soluble thermosetting polyester resin composition of claim 5, wherein the polybasic acid is at least one selected from the group consisting of ~~anhydrous phthalic acid, anhydrous tetrahydrophthalic acid,~~ isophthalic acid, terephthalic acid, adipic acid, azelaic acid, sebacic acid, and cyclohexane diacid. ~~and trimellitic anhydride.~~

9. (Currently Amended) The method of preparing a water soluble thermosetting polyester resin composition of claim 5, wherein the anhydrous polybasic acid is at least one selected from the group consisting of anhydrous maleic acid, anhydrous phthalic acid, anhydrous tetrahydrophthalic acid, and trimellitic anhydride.

10. (Currently Amended) The method of preparing a water soluble thermosetting polyester resin composition of claim 5, wherein the amine is at least one selected from the group consisting of ethylene diamine, dimethyl ethanolamine, triethylamine, diethanolamine, triethanolamine, monoethanolamine, diethylethanolamine, diethylene diamine, monoethylamine, dipropyl ethanolamine, diethyl cyclohexylamine, diethylene triamine, dioctylamine, and dioctyl aminoethanol.

11. (Currently Amended) The method of preparing a water soluble thermosetting polyester resin composition of claim 5, further comprising adding deionized water for preparing a water soluble thermosetting polyester resin composition having a solid content of about 50- to about 60 %percent by weight after adding the amine.

12. (Currently Amended) The method of preparing a water soluble thermosetting polyester resin composition of claim 11, wherein the thus prepared water soluble thermosetting polyester resin composition has an acid value of about 60- to about 80, a hydroxyl value of about 50- to about 120, ~~pH of about 7-9~~ and a water diluting property of about at least 300%.

13. (Currently Amended) The water soluble thermosetting polyester resin composition of claim 1, wherein the polyethylene terephthalate has a molecular weight of about 1,500- to about 2,000.